

tuberculata (Müll.), a widely distributed Oriental form, much more strongly sculptured, with more convex whorls.

M. boninensis Lea has been found to grow much larger than the original examples, reaching a length of 32.5 mm.

Melania libertina var. *gigas* n. v.

Very large, finely striate spirally, more coarsely so at the base, but without longitudinal folds. Olivaceous-brown, yellow in places, with some darker-brown streaks; the color concealed by a black ferrous coat. Length of decollate shells with about 4 to $4\frac{1}{2}$ whorls remaining, 48 to 51, diam. 20 mm., length of aperture 21 to 22 mm.

Arato, Echizen. Types no. 86441 A. N. S. P., from no. 171 of Mr. Hirase's collection.

This is the largest Japanese Melanian now on record. Some specimens of *M. löbbeckiana* are longer, but they are not so stout in figure.

A SINGULAR EOCENE TURBINELLA.

BY WILLIAM HEALEY DALL.

A singular *Turbinella* has recently been received from Mr. S. W. McCallie, of Georgia, which seems to stand, to some extent, between the two well known types, *Turbinella* proper and *Vasum*.

Psilocochlis subg. nov.

Shell thick and heavy, with depressed dome-like spire and few whorls, a strong siphonal fasciole surrounding a wide umbilical funnel, which is completely filled by a heavy deposit of callus, which also extends to the posterior angle of the aperture; the pillar exhibits three strong elevated plaits, and the surface is smooth or free from ribs, nodules, or prominent sculpture of any kind. Type:

Turbinella (*Psilocochlis*) *McCallie* sp. nov.

Shell short and broad, with about four whorls, of which all but the last are very small; apex hardly rising above the last whorl, which is dome-shaped above and widest at about the level of the posterior angle of the aperture, diminishing forward and slightly constricted behind the strong and flaring siphonal fasciole; umbilical funnel smooth, but nearly filled with a smooth appressed mass of callus, con-

tinuous over the body, and much thickened behind; pillar straight, with three strong plaits, canal shallow, short; suture distinct, surface smooth except for very fine incremental and revolving lines; outer lips broken, but apparently simple and sharp. Length 50, max. breadth about 38 mm., diameter of umbilical funnel about 20 mm.

Horizon: Claibornian Eocene of Richmond Co., Ga.

This singular shell has very much the aspect of *Pyrala smithii* Lea (*Lacinia alveata* Conrad), Contr. to Geology, pl. v, fig. 162; but has a lower spire, and is wider and rounder at the shoulder, beside having the strong plaits on the pillar which do not exist in *Lacinia*. It will be illustrated in a forthcoming publication. Meanwhile collectors should be on the lookout for it.

NEW VARIETIES OF AMERICAN LIMNÆAS.

BY FRANK COLLINS BAKER.

Limnæa reflexa iowaensis var. nov.

Shell thin, with a short, dome-shaped spire; whorls 5-5½, rather flat-sided, loosely coiled; suture well marked but not profound; aperture with the characteristic turret of typical *reflexa*, with a heavy plait extending across the columellar callus; spire and aperture of equal length; color dark horn, either plain or with spiral or longitudinal zebra-like markings; aperture marked internally by several longitudinal red bands, indicating the position of former peristomes; umbilicus covered.

Length 28.50, width 12.00, aperture length 13.50, width 7.00 mill.

Length 30.00, width 11.50, aperture length 15.00, width 7.00 mill.

Length 26.50, width 11.50, aperture length 14.00, width 7.50 mill.

Length 26.00, width 11.00, aperture length 12.00, width 6.00 mill.

This peculiar variety was found in a collection recently sent to the writer for study, by Mr. Bryant Walker. It differs from all forms of this species in having the spire and aperture of equal length, in the peculiar dome-shaped spire and in the general robust appearance.

In the Illinois and Michigan Canal, at Joliet, this variety is found and shows a perfect gradation from the short, stumpy variety, with